TO: Thomas Frutchey, City Manager

FROM: Dick McKinley, Public Works Director

SUBJECT: Recycled Water Project Design, Environmental Review, and Financing

DATE: September 6, 2016

NEED: For the City Council to consider three actions to further develop the Recycled Water Project and compete for grant funding: (1) authorize a preliminary design contract with RMC for the Recycled Water Distribution System; (2) extend the agreement with SWCA Environmental for preparation of environmental documents; and (3) enable the City to pursue State Clean Water Revolving Fund (SRF) reimbursements for the Recycled Water Distribution System design and construction.

FACTS:

1. In 2014, the City Council adopted a master plan to deliver recycled water from the planned Tertiary Treatment Facilities at the City's wastewater treatment plant to east Paso Robles using a Recycled Water Distribution System. The Tertiary Treatment Facilities and Recycled Water Distribution system are collectively referred to as the Recycled Water Project.

2. In 2015, the City extended an agreement with Black & Veatch to design the Tertiary Treatment Facilities at the Wastewater Treatment plant. These additional facilities will enable the City to comply with stringent water quality requirements for the City's wastewater discharge (including meeting the trihalomethane standards) and will produce up to 4.9 million gallons per day of high quality effluent. This effluent could be used beneficially as recycled water. Design of the Tertiary Treatment Facilities is now 90% complete. The Tertiary Treatment Facilities are estimated to cost $17.2 million (in 2017 dollars).

3. In 2015, the City also extended an agreement with SWCA Environmental Consultants, to prepare environmental documents required to comply with the California Environmental Quality Act (CEQA) and the State's Clean Water Revolving Fund (SRF) requirements for the Tertiary Treatment Facilities. The CEQA process for the Tertiary Treatment Facilities is now complete.

4. The SRF loan program provides low-interest financing for projects that clean water and expand water recycling in California. SRF is

currently also offering Proposition 1 grants for up to 35% of recycled water project costs, in combination with a low-interest loan. SRF is also offering a limited amount of "Green Project Reserve" (GPR) grant funding for clean water projects that are "environmentally innovative." Many California cities and districts are competing for recycled water grant funds, which are awarded based on application completeness and readiness to proceed with construction.

5. The September 2015 *Wastewater Rate and Revenue Analysis* by Water Consultancy/HDR found that revenues of the City's Sewer Fund are sufficient to pay the additional debt of an SRF loan for construction of the Tertiary Treatment Facilities.

6. In December 2015, City staff applied to SRF for a combination grant and low interest loan for the Tertiary Treatment Facilities. The Tertiary Treatment Facilities may be eligible for a GPR grant of up to $4 million.

7. In January 2016, SRF staff invited the City to expand its application to include the Recycled Water Distribution System. Completion of the Distribution System now would enable the City to compete for a Proposition 1 water recycling grant.

8. In March 2016, the City updated its application to SRF to include an additional $12.5 million for the Recycled Water Distribution System. The total amount of requested financing is now $29.7 million.

9. The planned Recycled Water Distribution System consists of pumping, operational storage, and approximately four miles of new pipeline needed to deliver recycled water to irrigation uses in the corridor between the Wastewater Treatment Plant and Barney Schwartz Park. The Distribution System may also be used for recharge of groundwater in the Huer Huero Creek area and could facilitate sales of recycled water for irrigation of agriculture east and/or north of City limits. Subsequent phases of the recycled water system may extend the pipeline to provide recycled water to existing and future uses in the south-eastern part of the City. Recycled Water and the Recycled Water Distribution System are expected to be key parts of the City's Sustainable Groundwater Management Act compliance strategy (the GSP being required of the City).

10. In order to meet SRF requirements and compete for GPR and Proposition 1 grant funding, the City must take the following actions:

- Proceed with design of the Recycled Water Distribution System.

- Extend a contract with SWCA Environmental Consultants to prepare environmental documents for the Recycled Water Distribution System;

- Update the Reimbursement Resolution City Council originally adopted in October 2015 to reflect an increased loan principal amount.

11. In July 2016, a committee of City management staff completed a qualifications-based selection process for preliminary design of the Recycled Water Distribution System. The process included solicitation of qualifications from professional engineering firms, review of qualifications and written proposals, and interviews. The selection committee determined RMC Water and Environment (hereafter "RMC") is the most qualified and best fit for the design work.

12. Staff negotiated a scope of work, fee, and schedule with RMC, which are attached. The scope of work includes: analysis of groundwater recharge opportunities in the Huer Huero Creek area; outreach to potential recycled water customers; evaluation of various river crossing, pipeline, and elevated storage alternatives; and preliminary design of the system, including construction cost estimates. RMC's fee for this work is $438,178.

13. SWCA Environmental Consultants submitted a scope of work to prepare all environmental documents (alternatives evaluation, Initial Study, Mitigated Negative Declaration, etc.) required to comply with CEQA and SRF requirements for the Recycled Water Distribution System. SWCA's fee is $85,819.

ANALYSIS & CONCLUSION:

RMC is a professional engineering firm based in Walnut Creek that specializes in recycled water planning and design. RMC's proposed team has planned and designed many recycled water systems throughout California. RMC has excellent understanding of regulatory requirements and demonstrated success in helping communities obtain grants for recycled water projects. Design of the Paso Robles Recycled Water Distribution System requires analysis of groundwater recharge opportunities in the Huer Huero Creek area. RMC's sub-consultant, Todd Groundwater, will lead the evaluation of the groundwater recharge for the project. Todd Groundwater is very knowledgeable about the Paso Robles Groundwater Basin, led past basin groundwater modeling

efforts, and has served the City with recent water resources evaluations and planning projects. RMC's team has demonstrated understanding of the City's needs and has proposed an efficient approach to completing the work. Staff recommends adoption of the attached Resolution No. 16-AA, to authorize the City Manager to enter into an agreement with RMC for preliminary design of the Paso Robles Recycled Water Distribution System, for an amount not to exceed $438,178. RMC is prepared to proceed with the work.

Completion of the preliminary design will allow environmental documents to be prepared, which are necessary to obtain SRF loans and grants. Staff also recommends adoption of the attached Resolution No. 16-BB, to extend its agreement with SWCA Environmental Consultants, to prepare the necessary environmental documents for the Recycled Water Distribution System, for an amount not to exceed $85,819.

An updated Reimbursement Resolution is also attached. This resolution enables the City to be reimbursed for costs incurred on the Recycled Water Project (e.g., planning and design) prior to execution of a financing agreement. The update is simply to reflect the increased possible loan principal amount of $29.7 million. (In practice, if the City were to receive a GPR or Proposition 1 grant, the loan principal amount would be much less than $29.7 million.) Staff recommends adoption of the updated Reimbursement Resolution.

Approval of these three actions is necessary on order for the City to complete an application to SRF and pursue available grant funding.

Staff's goal is to start construction of the Tertiary Treatment Facilities in early 2017 and start construction of the Recycled Water Distribution system by late 2017, so that both parts of the Recycled Water Project are completed by 2019.

POLICY REFERENCE: Recycled Water Master Plan, Urban Water Management Plan

FISCAL IMPACT: The adopted budget for Fiscal Year 2016/17 includes $1,065,000 for the Recycled Water Distribution System (Budget No. 6019101-54520-C0078). The proposed expenditures are within this budget. These costs may be incorporated into an SRF loan. The proposed expenditures could lead to major grant funding.

Looking forward, if the City were to receive a $4 million GPR grant for Tertiary Treatment Facilities and a Proposition 1 grant for 35% of the Recycled Water Distribution System cost (about $4.2 million), the total

borrowed amount for a complete Recycled Water Project would be $21.3 million, which is only $4.1 million more than the City originally anticipated to finance for the Tertiary Treatment Facilities alone (see the September 2015 *Wastewater Rate and Revenue Analysis at* http://www.prcity.com/government/citycouncil/agenda-items/2015/10_October/2015_10-20_cc_itm_08.pdf). The impact of that reduced additional debt is further reduced, as construction of the Recycled Water Distribution System now will enable the City to generate revenue from sale of the recycled water and thus offset much of this additional debt.

The City's water and wastewater rates analyst, Roger Null of HDR, recently updated the financial model for the City's Sewer Fund to evaluate if sewer rate increases would be needed if the Sewer Fund were to take on additional debt for the Recycled Water Distribution System. The modeling results show additional sewer rate increases will not be needed if the City receives grant funding in combination with a low-interest loan. Alternatively, if the City does not receive any grants or much less grant funding than anticipated, the Sewer Fund may absorb the additional debt of the Recycled Water Distribution System without significant sewer rate increases, by either deferring other planned capital improvement projects or not funding depreciation of existing assets as aggressively as originally planned. Staff is planning to conduct a comprehensive study of the City's sewer rates in 2018 or 2019, after the Recycled Water Project costs are better defined and the availability of grants and financing terms are known.

OPTIONS:

a. Approve the attached resolutions, to: 1) authorize the City Manager to execute an agreement with RMC Water and Environment for preliminary design of the Recycled Water Distribution System; 2) authorize extension of an agreement with SWCA Environmental Consultants for preparation of environmental documents; and 3) enable the City to be reimbursed by SRF for costs incurred on the Recycled Water Project.

b. Amend, modify or reject the above options.

ATTACHMENTS:

1. RMC Water and Environment Scope of Work, Fee, and Schedule
2. SWRC Scope of Work and Fee
3. Resolution No. 16-AA, Authorize Agreement with RMC Water and Environment
4. Resolution No. 16-BB, Extend Agreement with SWCA Environmental Consultants
5. Resolution No. 16-CC, Reimbursement Resolution

Preliminary Design of Paso Robles Recycled Water Distribution System
Scope of Work

RMC Scope of Work

1. Data Collection and Review
2. Groundwater Recharge Evaluation
3. Facilities Evaluation
4. Preliminary Design
5. Exhibitions
6. Project Management

Task 1 - Data Collection and Review

1.1 Data Collection and Review

RMC will prepare a data request list for the City that will include existing pipeline and facility information (as-builts and utility mapping), Nacimiento Pipeline record drawings, WWTP drawings, previous reports related to the project, existing recycled water distribution system hydraulic model, GIS data, potable water pressure zone information for each customer, existing recycled water agreements, recent pipeline bid tabulations and cost data, and geotechnical reports within the vicinity of the project. RMC will maintain and update the data request list as additional needs are identified and data are received. Data received will be reviewed for completeness and assumptions developed for key data gaps.

1.2 Utility Research

RMC will identify agencies with utilities in the project area using the DigAlert online query system. RMC will prepare and transmit a letter and map requesting utility mapping from each utility agency identified through DigAlert ('A' letter). RMC will obtain and catalog utility data received using a filing system that will be transmitted to the final design team.

1.3 Phase 1 Customer Profiles

RMC will define customer needs by revisiting estimated customer demand information from the 2014 Recycled Water Master Plan, meeting with key potential Phase 1 customers, incorporating customer information provided by the City for other Phase 1 customers including existing recycled water agreements, and using its recycled water professional experience. RMC will document recycled water service requirements through meetings with the key Phase 1 customers, as follows:

1. Barney Schwartz Park (City Parks)
2. Cava RV Resort
3. Cuesta North Campus
4. Goetz Manderley (HOA), includes River Oaks Drive medians (2), Traditions Loop greenway, and River Oaks Center
5. Kermit-King Elementary School
6. River Oaks Golf Course, including River Oaks Park and River Oaks Hot Springs Spa
7. State Route 46 East (Caltrans)

In total, 7 meetings are assumed for budgeting purposes comprising up to 12 recycled water service locations. The purpose of each meeting is to introduce the Phase 1 project to the potential customer and collect recycled water service expectations, including:

- Average annual demand, maximum day demand, peak hourly demand, and irrigation schedules
- Any planned changes to landscape irrigation areas (i.e., reduced irrigated areas)
- Any special considerations (e.g., water quality requirements or preferences; seasonal demand fluctuations) associated with existing or anticipated future demands
- Point(s) of recycled water service
- Location of existing water meters, water lines, and other utilities associated with the property that may impact the location of conversion facilities
- Any on-site existing or planned features that could impact the location of conversion facilities, such as water features, outdoor eating area, drainage channels, or others
- For Cuesta North Campus and River Oaks Golf Course, the meeting may include discussion of easement / right-of-way. This information will require field validation during design

The meetings could include recycled water commitment discussions with a template commitment letter, if the City deems the effort to be beneficial to support recycled water program implementation and to support SRF application approval. In addition, the City will provide available customer profile information for other potential Phase 1 customers, including:

1. Ayres Hotel and Resort
2. Discovery Gardens / Entrada de Paso Robles (new development)
3. Golden Hills Road / Highway 46 commercial properties (4) (irrigation (2) and car washing (2))
4. Hunter Ranch Golf Course
5. Paso Robles Horse Park
6. Paso Robles Sports Club (irrigation)
7. Wisteria Project (new development)
8. Wisteria Road commercial properties (4) (irrigation)

The City will provide, at a minimum, estimated average annual recycled water demand and the other items listed above for the key Phase 1 customer meetings, if available If the information is not available, RMC will apply typical usage patterns, service pressure conditions, and water quality requirements for landscape irrigation customers based on the 2014 RWMP assumptions and its professional experience. The City's Wisteria Project meeting is expected to include discussion of easement / right-of-way.

RMC will prepare a brief description of each potential customer based on the information collected during meetings with key potential Phase 1 customers, information provided by the City, and its recycled water professional experience. The descriptions will be compiled in a Customer Profile Memo and the demand profiles will be incorporated into the hydraulic model, if appropriate.

Also, it is our understanding that the US 101 (Caltrans) customer will be served from the WWTP Tertiary Water (3W) system such that recycled water is delivered from the recycled water storage pond using the 3W Pump Station – and not the Phase 1 Recycled Water Pump Station.

1.4 Agricultural Customer Outreach

The purpose of this task is determine potential agricultural customer interest in the use of recycled water under a range of water quality (blend water and percentages), delivery methods (direct, shallow groundwater), and price points. The approach is to work with the City to develop a stakeholder outreach strategy designed to assess the acceptability and feasibility of recycled water use for agricultural

irrigation by key stakeholders. Ultimately, the goal of the outreach is to determine acceptable potential agricultural reuse system conditions and potential market for consideration of future system phases.

This task includes the following:

1. Assemble a limited list of key project contacts and stakeholders
2. Prepare agricultural stakeholder outreach materials
3. Conduct individual (3 budgeted) and small group meetings (5 to 10 budgeted) with a limited list of potential customers
4. Conduct an "open house" meeting to educate the potential agricultural customers

A portion of scope included in this task is proposed to be completed by Mark Battany, an agronomist with U.C. Agricultural Extension. This task is dependent on the City's and RMC's ability to utilize an agronomist from U.C. Agricultural Extension.

Agricultural Stakeholder List

At the kickoff meeting, we will review contacts from the City's previous efforts and from Mark Battany, an agronomist with U.C. Agricultural Extension, to create an agricultural stakeholder list. The list will be supplemented from the County Agricultural Commission or Farm Bureau (if available) and will focus on potential customers within a reasonable distance of planned recycled water pipelines and be used as a distribution list for the open house meeting. At the kickoff meeting, we will also discuss potential meeting participants.

Agricultural Stakeholder Outreach Materials

Up to three fact sheets and a PowerPoint presentation will be prepared to support the proposed meetings and open house. The fact sheets will include: recycled water program description, water quality scenarios, typical onsite connection facilities, and examples of agricultural reuse projects across California. A PowerPoint presentation will be prepared in support of the open house meeting.

Potential Agricultural Customer Meetings

RMC and the City will conduct up to three meetings with potential agricultural customers (to be determined) to introduce project concepts and gather potential customer opinions on conditions of agricultural reuse. Topics to be addressed will include, if available:

- Project timing
- Recycled water quantity available and potential customer demand
- Current irrigation practices (application method, irrigation schedule)
- Recycled water quality scenarios and customer water quality parameters
    - The water quality feedback will help clarify the potential need/ benefit and timing for a Nacimiento water connection to the system.
- Customer's future crop plans
- Recycled water delivery mechanisms
- Institutional scenarios

The meetings could include recycled water commitment discussions with a template commitment letter, if the City deems the effort to be beneficial to support recycled water program implementation and to support SRF application approval.

Up to three customer profiles based on meeting input will be incorporated into the Customer Profile Memo (Task 1.3).

In addition, the U.C. Agricultural Extension agronomist as a service to the City will contact five to ten potential customers to introduce project concepts and gather potential customer opinions on conditions of agricultural reuse. RMC does not plan to participate in these contacts by the agronomist so that the agronomist can receive unfiltered feedback from potential customers, which the agronomist will report to RMC and the City.

Open House

Following the targeted customer meetings, an open house meeting is proposed to get feedback from a larger group of potential agricultural customers. The target audience is agricultural owners and operators within a reasonable distance of planned recycled water pipelines (versus the entire groundwater basin or rural residential). The purpose of the open house meeting is to educate the potential customers on the topics identified for the customer meetings and gain feedback from a broader group than just the targeted meeting participants. RMC will can conduct live polling during the presentation, if the technology is available from U.C. Agricultural Extension, to gain anonymous and broader feedback.

The U.C. Agricultural Extension agronomist will follow up with available potential customers after the open house to further refine potential agricultural customer interest in recycled water.

1.5 Ground Survey

RMC's surveying subconsultant (North Coast Engineering) will perform field surveying with GPS surveying equipment to obtain the horizontal coordinates and elevation at key points along the proposed pipeline alignment to assist in the hydraulic evaluation. GPS accuracy is anticipated to be within 1 cm horizontally and 2 cm vertically. The surveyor will deliver a point file in AutoCAD format and a table that includes point ID number, location/description, coordinates, and elevation. The following key points have been identified by RMC.

1. Benchmark at the WWTP in order to correlate the elevations on the WWTP drawings with the elevations used on the alignment
2. Ground elevation of Dallons Drive near Jena Court (high point)
3. Ground elevation along Tractor Street between Engine Avenue and Combine Street (high point)
4. Ground elevation at end of Golden Hills Road (high point)
5. Ground elevation at east end of Wisteria Lane at end of pavement (high point)
6. Ground elevations at the top of embankment at Barney Schwartz Park Pond
7. Water surface elevation of Barney Schwartz Park pond
8. Elevation of an overflow weir at Barney Schwartz Park pond

Other elevations needed for the project will be obtained from the City's GPS contour file which has two foot contours.

Task 1 Deliverables:

- *Utility Mapping Files (pdf format files delivered on CD upon completion of the project)*
- *Log of utility contacts and data provided*
- *Customer Profile Memo (to be incorporated into Preliminary Design Report)*
    - *Includes up to three agricultural customers from three agricultural outreach meetings*
- *Agricultural stakeholder list (Excel)*
- *Agricultural stakeholder outreach materials (Presentation in PowerPoint; Fact sheets in pdf format)*
- *Brief summaries of potential agricultural customer contacts by U.C. Agricultural Extension agronomist (5 to 10; pdf format)*
- *Agricultural open house materials (pdf format)*

Task 2 - Groundwater Recharge Evaluation

The goal of the GWR evaluation is to identify favorable areas for recycled water recharge in the vicinity of Huer Huero Creek and the terminus of the recycled water pipeline near Barney Schwartz Park. Characteristics of a site with high recharge potential include high infiltration rates of near-surface soils, coarse-grained lithology and stable geochemical properties of vadose zone sediments, adequate depth to water to accommodate recharge mounding response, and good hydraulic connection between shallow alluvial and deeper production zone aquifers. The evaluation will be conducted considering discharge to the creek as part of a revised NPDES permit and discharges under a new groundwater replenishment reuse project (GRRP) permit.

The GWR evaluation includes five main components, which comprise the five subtasks:

1. Recharge regulatory approach assessment
2. Desktop review of relevant technical reports and hydrogeologic data and development of new site-specific detailed hydrogeologic cross sections based on existing data
3. GIS-based, screening-level analysis of potential recharge sites, culminating in the development of a shortlist of sites with high recharge potential
4. Preliminary field investigation to verify subsurface characteristics of the vadose zone for preferred sites
5. Documentation in a Technical Memorandum (TM)

2.1 Groundwater Recharge Regulatory Assessment

The GWR regulatory assessment will evaluate potential permitting pathways and constraints. There are three basic GWR permitting options available:

- NPDES
- GRRP
- No Recycled Water Permit

An NPDES permit point of discharge revision could be the simplest approach but discharge locations are limited to the creek, which may not be the best location for deep basin recharge. A GRRP permit has the most restrictions and compliance requirements. Regulations governing GRRP include a long list of items.

Of the requirements, the maximum recycled water contribution (RWC), or minimum blending water requirement, is most relevant to defining a GRRP in the Paso Robles Basin. RWC is a function of total organic carbon concentration in the recycled water.

The GWR regulatory assessment will consider various approaches to meeting GRRP requirements while maximizing recharge volumes balanced with costs. The preferred permitting pathway for the GWR aspect of the project will consider the pros and cons of the permitting options and will consider hydrogeological evaluation findings of feasible recharge options, the likelihood of recharged water reaching and benefiting the deep aquifers, and the relative precision of recharge and recovery estimates. The preferred pathway will help clarify the need and timing for a Nacimiento water connection to the system. For example, if the NPDES pathway is determined to be infeasible, the availability of Nacimiento water as a diluent water supply may benefit the recharge project.

One meeting is included with the Central Coast RWQCB, City representatives, and RMC project manager to discuss NPDES permit options. The assessment, including RWQCB findings, will be documented in the GWR Evaluation TM.

2.2 Review Existing Data and Construct Hydrogeologic Cross Sections

To support site screening analysis and field evaluation of recharge feasibility, we will review existing technical reports and water level, hydrogeologic, water quality, and production databases. In addition to updating these datasets, we will develop new detailed hydrogeologic cross sections across the study area to delineate the lithologic distribution of vadose zone sediments. These cross sections will be used to bridge the understanding of subsurface conditions from previous studies that exclusively have focused on the hydraulic characteristics of near-surface soils (i.e., uppermost five feet) or on the saturated aquifer systems below the water table.

Results of the cross section analysis will help to identify the extent of high permeability (sand/gravel) and low permeability (silt/clay) lenses in the study area and, combined with water level data, will be used to estimate available storage volumes and replenishment/recovery opportunities.

2.3 Develop GIS Database and Screen for Potential Recharge Sites

Pertinent hydrogeologic and land use information will be prepared and incorporated into a working project GIS database. Key datasets will include (if readily available) surface topography (slope), soil hydraulic properties (hydrologic class and/or saturated hydraulic conductivity), vadose zone hydraulic characteristics, depth to water, horizontal and vertical hydraulic conductivity of saturated zone, land use designation, and private and public water supply wells.

The GIS database will be used to identify sites with the highest recharge potential by assigning key hydrogeologic factors a percent-weight value based on relative influence on recharge potential. A map showing relative potential (e.g. high, medium and low) for managed aquifer recharge will be developed, and sites with the highest recharge potential will be selected for further investigation.

2.4 Conduct Field Investigation (2 sites)

It is assumed that the GIS screening will identify two preferred sites for further evaluation. A field investigation program will be proposed for the two preferred sites to characterize the

stratigraphy/lithology and confirm estimated infiltration rates of the upper vadose zone. Each site will include two CPTs to 80 feet and drilling one soil boring to 80 feet. The soil boring would be drilled using a limited-access (track-mounted) hollow-stem auger rig.

This task also includes the design, coordination, and implementation of a field-scale infiltration test at the two preferred sites. While numerous methods are available for testing soil infiltration capacity, consideration of site-specific conditions is necessary to make sure that the work plans provide cost-effective means to collecting pertinent field data. Important factors include topography, land cover, site access, site security, permitting requirements, earthwork restrictions, availability of recharge water, and associated equipment and labor needs to provide for successful test implementation. A site visit will be conducted prior to implementing the field program, during which we will (1) assess physical conditions and access for heavy machinery, (2) mark suitable temporary test basin sites, (3) confirm water source locations and maximum delivery rates, (4) identify preliminary test recharge basin locations and dimensions, and (5) review procedures for test basin construction, instrument setup, and implementation. Proposed CPT and soil boring locations would also be confirmed during the site visit.

All field work would be performed under the supervision of a California Professional Geologist. Todd Groundwater will provide onsite field inspection of all field activities and will document formation sampling, geologic logging, and field activities. Collected field data will be analyzed to estimate the site recharge potential and used to refine the hydrogeologic cross sections developed in Task 2.2.

2.5 Prepare Draft and Final TMs

Documentation of local hydrogeologic conditions pertaining to recharge feasibility and regulatory constraints will be summarized and presented in a Draft TM, which will be submitted to the City for comment. The report will document the regulatory assessment; the new hydrogeologic cross sections; data, methods, and results of the site screening analysis; and appropriate tables and figures documenting the field investigation. The report will present recommendations on recharge site, recharge capacity, and facility design requirements. Comments received will be addressed in a Final TM.

Task 2 Deliverables:

- *Draft and Final Groundwater Recharge Evaluation TM (pdf format)*

Task 3 - Facilities Evaluation

Note that since the terminus of the Phase 1 alignment may be affected by the findings and results of Tasks 1.3 and 1.4, evaluation of facilities south of Highway 46 (~3,500 LF and storage) will not be conducted prior to direction by the City.

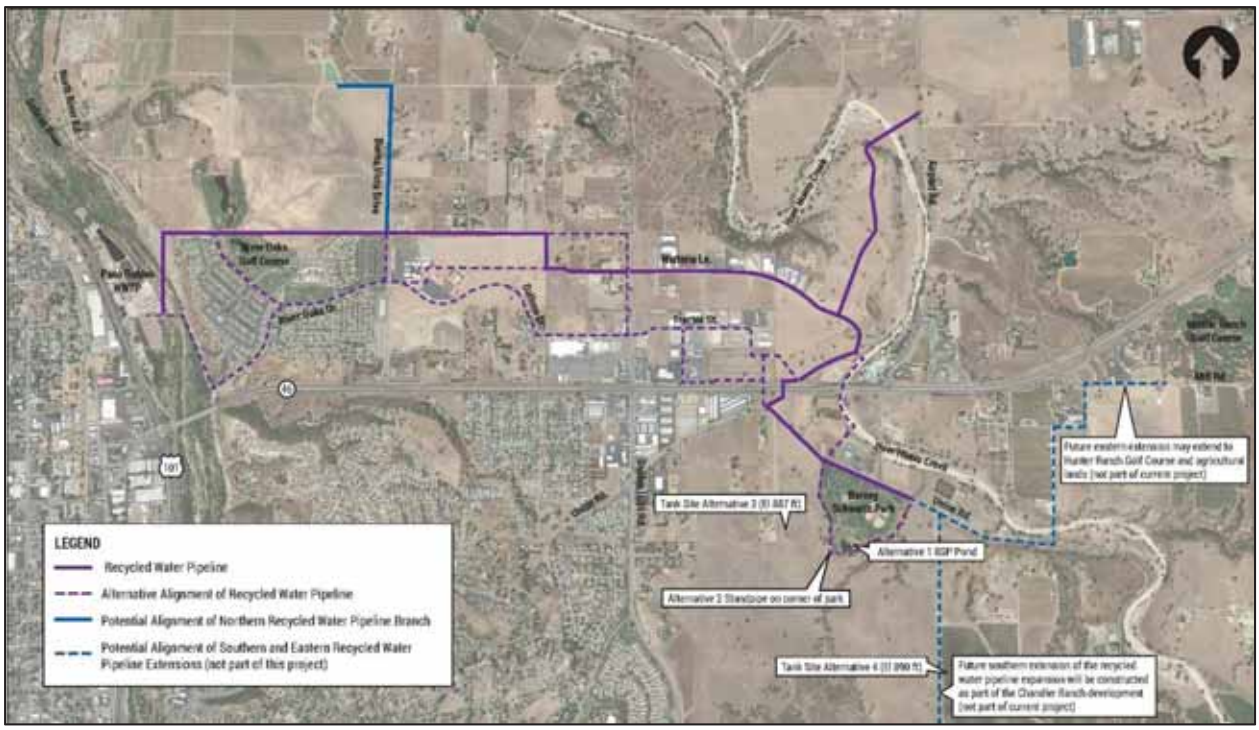
3.1 Alignment Evaluation

RMC will evaluate alternative alignments in the locations shown in Figure 1:

1. River Oaks Drive versus Clubhouse Drive and Proposed New Development Easement
2. Dallons Drive versus existing easement by Cuesta College Campus North
3. Dallons Drive versus north edge of Borkey Area Specific Plan
4. Dallons Drive versus City limits between Buena Vista Drive and Golden Hills Road
5. Tractor Street, Wallace Drive, and Combine Street area

6. Wisteria Lane versus Tractor Street
7. Crossing Highway 46 at Union Road or at Huer Huero Creek (below Hwy. 46 bridge)
8. Barney Schwartz Park

Figure 1: Alternative Alignments



Alignments will be evaluated based on utility congestion, available right-of-way or easement requirements, seismic hazards and subsurface conditions, hydraulic considerations, permitting requirements, traffic and constructability issues, cost and environmental considerations. Due to the large number of sub-segments being considered, the first step in the evaluation will be to remove sub-segments with obvious disadvantages (compared to other segments) from further evaluation. For example, the sub-segment that starts at Dallons Drive and extends through the Cuesta North Campus following the existing sewer trunk easement will be eliminated from further consideration due to the current construction of school buildings in that area combined with the separation requirement from the sewer trunk.

The RMC pipeline lead engineer will spend one day in the field driving the alignment and walking the alignment in key areas. City staff will provide written input related to potential easement acquisition for the various segments across private land (e.g. Cuesta North Campus, potential easements through River Oaks development, potential east/west easement north of Cuesta North Campus, potential easement through parcels on Combine Street, and Wisteria Project (new development)).

Utility congestion will be based on utility information collected under Task 1.2 and field observations from the one day alignment visit. Potholing will not be performed as part of the preliminary design phase. Easement widths and locations will be based on the City GIS information. Neither property line surveying nor title report investigation will be performed. Seismic hazards and subsurface conditions will

be based on the WWTP and Barney Schwartz Park geotechnical reports as well as City staff knowledge. Geotechnical borings will not be performed as part of the preliminary design. Traffic issues will be based on brief field observations from the one day alignment visit. Traffic counts will not be performed. The City's environmental consultant will provide information about the environmental impacts of the alignment. Leaky tank database and biological database searches are outside RMC's scope will not be performed as part of the preliminary design phase.

To evaluate the two alternatives near River Oaks Golf Course, cost information from the Salinas River crossing from Task 3.2 will be considered.

A Draft Alignment Evaluation TM will be prepared and will include:

- Evaluation criteria and methodology
- Alignment alternatives presented on an aerial imagery background
- Descriptions of alternatives using the evaluation criteria
- Cross sections at key locations showing existing right of way, paving, curb and gutter and utilities
- Evaluation matrix and discussion
- Recommended alignment for review and comment by City staff

The Final Alignment Evaluation TM will address City comments and will be included as an appendix to the Preliminary Design Report prepared in Task 4.

3.2 Trenchless Crossings Evaluation

RMC will evaluate applicable trenchless pipeline installation methods for crossing the Salinas River, Huer Huero Creek, and Highway 46.

Salinas River Crossing

It is currently assumed that installing a pipeline across the Salinas River using open cut construction methods is not viable from a permitting standpoint. The City's environmental consultant will provide information about the environmental impacts of crossing the Salinas River using open cut construction methods. In order to consider a spectrum of trenchless construction methods, horizontal directional drilling (HDD), microtunneling, and pilot tube guided auger boring will be examined. Currently it is expected that the preferred method will be HDD.

Three alternative alignments will be evaluated as shown in Figure 2:

1. Single recycled water pipeline
2. Two pipelines (recycled water pipeline and Nacimiento water pipeline)
3. Three pipelines (same two as previous plus a force main replacement)

Figure 2: Salinas River Trenchless Crossing Alternatives

Since this evaluation will be performed early in the project, the following pipe sizes will be assumed when performing the evaluation: 24-inch recycled water pipeline, 24-inch Nacimiento water pipeline, and 12-inch force main.

A CAD file drawing will be prepared for each alternative showing: drill rig location, major drill side equipment (mud pump, generator, and control cabin), rig side work area, pipe string location, pipe string work area, and profile. For this evaluation, geotechnical conditions will be based on the WWTP and Nacimiento Pipeline geotechnical reports as well as City staff knowledge. Geotechnical borings will not be performed as part of the preliminary design. The evaluation will describe the crossing, describe horizontal directional drilling as it relates to this crossing, cost of the crossing, construction duration, schedule impacts due to permits and environmental mitigation, and permits required.

A combination of a bike trail bridge and pipe bridge across the Salinas River will be evaluated. This brief evaluation is limited to a brief description of the combination bridge, a sample figure, and one construction cost estimate, and listing of potential project impacts (e.g. permitting, schedule) relative to a trenchless crossing, to determine if this option should be investigated and developed further. Information will be presented at a project progress meeting and included in the Trenchless Crossings Evaluation TM. The evaluation will include a listing and description of grants related to the bike trail bridge.

Huer Huero Creek Crossing

The Huer Huero Creek crossing is located at the northern end of the Wisteria development near Airport Road as shown in Figure 1. Currently it is assumed that the Wisteria development will construct a road

crossing at this location and that the recycled water pipeline would be constructed as part of that road construction. Since the timing of that road construction is unknown at this time, it may be necessary to construct the recycled water pipeline before the road is constructed. Two construction methods, open cut and HDD, will be evaluated. The evaluation will describe the crossing, describe both construction methods as they relate to this crossing, describe horizontal directional drilling as it relates to this crossing, cost comparison of the two methods, construction duration, schedule impacts due to permits and environmental mitigation, and permits required. The City's environmental consultant will provide information about the environmental impacts of crossing the Huer Huero Creek using both construction methods. A CAD drawing will not be prepared for the Huer Huero Creek crossing as part of the preliminary design. For this evaluation, geotechnical conditions will be based on City staff knowledge. Geotechnical borings will not be performed as part of the preliminary design.

Highway 46 Crossing

The Highway 46 crossing is located in the vicinity of Union Road as shown in Figure 1. Three alternatives will be evaluated:

- Traditional jack and bore (aka pipe jacking) at Union Road
- Open cut within Huer Huero Creek under the existing Highway 46 bridge
- Attach recycled water pipeline to the underside of the existing Highway 46 bridge

The evaluation will describe the crossing, describe the three construction methods as they relate to this crossing, cost of the crossing, construction duration, schedule impacts due to permits and environmental mitigation, and permits required. The City's environmental consultant will provide information about the environmental impacts of open cut construction within Huer Huero Creek and the environmental impacts of the construction activities necessary to attach the pipe to the underside of existing bridge (scaffolding in the creek bed, etc.). A CAD drawing will not be prepared for the Highway 46 crossing as part of the preliminary design. For this evaluation, geotechnical conditions will be based on Caltrans soil borings for Highway 46 (if available) and City staff knowledge. Geotechnical borings will not be performed as part of the preliminary design.

RMC will present the evaluations and preliminary findings in a Trenchless Crossings Evaluation TM for review and comment by City staff. Also, a proposed construction schedule will be included which can be used to support the environmental document. The Final TM will address City comments and will be included as an appendix to the Preliminary Design Report prepared in Task 4.

3.3 Nacimiento Project Connection Evaluation

The concept of blending available Nacimiento water with recycled may offer the following benefits:

- improve water quality and marketability for direct use of recycled water (evaluated with Task 1)
- provide a supply of diluent water, if necessary, for the preferred recharge pathway for blending with recycled water (Task 2).

RMC will evaluate the potential need, benefit, and feasibility of blending surplus Nacimiento water with recycled water to increase the marketability of recycled water for irrigation uses and benefit the planned groundwater recharge. This evaluation will consider the findings of Tasks 1 and 2 as they pertain to the use of Nacimiento water and will take into account near- and long-term availability of surplus Nacimiento water and WWTP capacity for this purpose, and other identified alternatives (e.g.

use of a dedicated groundwater well for blending). This brief evaluation will be documented in a TM for review and comment by City staff. The Final TM will address City comments and will be included as an appendix to the Preliminary Design Report prepared in Task 4.

If significant benefit is identified from use of Nacimiento water for blending with recycled water, further investigation and development of alternatives to facilitate use of Nacimiento water could be provided as an optional task item by amending RMC's scope and fee.

3.4 Hydraulic Evaluation and Modeling

The objective of hydraulic modeling of the proposed system is to establish system operation and level of service, both in the near term (Phase 1) and long term (build out). This task aims to address the following:

- Preferred Phase 1 storage option
- System delivery capacity for recharge under summer and winter demand conditions
- Sizing RWPS pumps for near term operations and long term operations assuming a new tank is installed in the future for long term operations (beyond Phase 1)

Phase 1 Storage

The first step will be a brief evaluation of five storage/tank alternatives (shown on Figure 1):

- Alt 1: Barney Schwartz Park (BSP) pond
- Alt 2: Standpipe (Narrow, tall tank) at southwest corner of BSP
- Alt 3: Hill 887 (elevation in feet) west (approximately 700 feet) of BSP
- Alt 4: Hill 890 (elevation in feet) southeast (approximately 2,400 feet) of BSP
- Alt 5: No tank (closed system)

The storage/tank site evaluation will be limited to hydraulics (static HGL), environmental impacts/permitting, property/easement acquisition, schedule impacts, operations & maintenance, capital cost, and potential recycled water use and associated revenue. The cost of the property acquisition will be based on typical values and not a property evaluation of the site. The hydraulic evaluation will focus on whether the storage site allows water to flow back to River Oaks Golf Course when pumps are off and which of the potential Phase 1 customers' minimum service pressure requirements can be met without individual customer boosting. The City's environmental consultant will provide information about the environmental impacts of tank construction (including access road) to be used in the tank site evaluation. City staff will provide written input related to potential property/easement acquisition for the pipeline segment across private land to the various tank sites.

Based on the Phase 1 storage evaluation by RMC, the City will decide which storage alternative will be used in the preliminary design.

The storage recommendation will be made early in the pre-design process and has significant cost and operational impacts. As a result, RMC's level of effort assumes additional criteria may be requested to support the evaluation and assumes that the evaluation will be revised several times to enable a preferred storage alternative decision. The evaluation has the potential to have a number of sub-alternatives (e.g., range of flow rates and different pipeline alignments that may impact system hydraulics and therefore impact the feasibility of some of the alternatives) that would be part of a

revised storage alternatives evaluation. Three evaluations of storage alternatives are assumed (original evaluation plus two revisions).

Hydraulic Modeling
After the preferred storage option has been determined, the following hydraulic scenarios will be evaluated and documented:

Near Term:

1. Minimum System - Service only to Barney Schwartz Park and River Oaks Golf Course. Three filling period options are assumed (e.g., 20 hour, 12 hour, and 4 hour). Hydraulic grade line (HGL) of system and flowrate to River Oaks Golf Course will be established when pumps are off and on.
2. Phase 1 Customers – Service to all Phase 1 customers. Establish HGL and determine service pressure to customers with pumps off and on. Identify where customer boosting may be required.
3. Agricultural / Recharge Operations – Define how much flow could be delivered to agricultural customers and/or recharge area during a maximum summer day and a winter day for the "minimum" system and Phase 1 system. Establish the required pump size for near term and how this may be leveraged to allow phasing of pumps to serve long term needs.

Long Term (The "long term" system configuration includes in-City customers shown in the RWMP south of Barney Schwartz Park):

4. Long term Conditions – Service to Phase 1 and remaining in-City customers from RWMP (south of Barney Schwartz Park). These model runs include the Chandler Ranch tank (elevation 1,017 feet (approx.). Establish HGL under the following conditions:
    a. Summer / Irrigation hours
    b. Summer / Non-irrigation hours
    c. Winter / Irrigation
    d. Winter / Non-irrigation
5. Service Pressures - Establish service pressure to all customers with pumps off and on.
6. Agricultural / Recharge Operations - Define how much flow could be sent to agricultural customers or recharge area during a maximum summer day and a winter day for the long term system. Establish the largest pump(s) the system would need at the WWTP, which is the basis for sizing electrical equipment (MCCs, transformers, etc.) and structural items (pump cans, space between pumps, etc.).

Prior to conducting the hydraulic analysis, RMC, with input from the City, will confirm the operational scenarios. RMC will work with the City to determine both physical performance criteria (customer service pressures, pipeline velocity, head loss, etc.) and level of service criteria (reliability, redundancy, and customer storage and boosting requirements) to form a more complete basis for evaluating each scenario with respect its ability to meet these criteria. Following this meeting, RMC will document the proposed performance and level of service criteria in a TM for the City's review and comment. The 2014 RWMP will be used as a starting point for these discussions.

Once these criteria are developed and agreed to, RMC will review the existing recycled water hydraulic model and documentation to obtain pertinent information for developing recycled water conveyance

scenarios. RMC understands that the original model was prepared using Bentley WaterCAD. The updated model will use Innovyze's InfoWater platform.

RMC will develop recycled water conveyance scenarios that will take into account the potential customer demand profiles, operational storage scenarios, and recharge scenarios developed through consultation with the City. Included for each scenario will be recycled water demand requirements; operational storage assumptions; customer service pressure requirements; and recharge assumptions. RMC will prepare a TM defining these hydraulic modeling scenarios for review by the City prior to developing the model inputs. The scenarios will be refined based on City input.

RMC will update the existing hydraulic model and develop model input files based on the agreed upon scenarios. Based on the preliminary list of hydraulic questions shown above, RMC assumes that approximately 15 to 20 steady state scenarios will be developed and used to evaluate and define pipe sizing for the project. Each scenario will be evaluated for the peak demand condition and winter water age. A 24-inch diameter backbone pipeline has been assumed but will be confirmed or revised based on this evaluation.

Based on the scenarios envisioned above and our understanding of the City's operational and service objectives, RMC's experience suggests that steady state modeling will be sufficient to analyze hydraulic issues and verify system performance. Steady state modeling offers a "snapshot" of system performance under specific conditions (for example, peak hour or average day demands, and reservoir filling periods). By contrast, extended period simulation (EPS) modeling incorporates time variability into the hydraulically analysis, simulating hourly variations in customer demands and complex pump and reservoir operation to evaluate and optimize system performance over longer periods of time. While this analysis can be valuable for large or complex systems, RMC finds that the additional time and labor required to implement EPS modeling results in a more complex model that is more difficult to modify in the future and provides little benefit for recycled water planning studies of this type. EPS is beyond what is required for most recycled water systems.

Recycled Water Pump Station

The City's Tertiary Treatment Facilities design engineer, Black & Veatch, is currently finalizing design documents for the underground portions of the Recycled Water Pump Station and will be preparing bid documents which will include civil components of the pump station, and conduits. RMC will provide recommended pump sizing for near term and long term system operations. . It is anticipated that the Recycled Water Distribution System Design Engineer will prepare bid documents for the above ground portion of the pump station (electrical, mechanical, and instrumentation) once the Recycled Water Distribution System Preliminary Design Report is completed by RMC.

Two coordination meetings (via webinar / teleconference) with Black & Veatch and the City are assumed to understand pump station constraints and support coordination and timing of recommendations.

Technical Memorandum

The Hydraulic Evaluation and Modeling TM will include documentation of the storage evaluation; hydraulic model criteria, scenario descriptions, scenario results and evaluation; and near term and long term RWPS pump sizing. Documentation of each model scenario will include purpose of the scenario,

model parameters and assumptions, results, and impacts on system design and operations. As an appendix to the TM, RMC will tabulate demands associated with each customer (near and long term) and the model nodes to which these demands are allocated for each scenario.

Task 3 Deliverables:

- *Draft and Final Alignment Evaluation TM (pdf format)*
- *Draft and Final Trenchless Crossings TM (pdf format)*
- *Draft and Final Nacimiento Project Connection Evaluation TM (pdf format)*
- *Draft and Final Hydraulic Evaluation and Modeling TM (pdf format)*

Note: Each TM will be included as an appendix to the Preliminary Design Report (Task 4)

Task 4 – Preliminary Design

Using the results from Tasks 1 through 3, RMC will develop a preliminary design report for the proposed project.

4.1 Pipeline Material Evaluation and Recommendations

RMC will evaluate potential pipeline materials for the project. The evaluation will include preliminary cost estimates for each material option including material and installation costs, applicability and availability, material benefits and limitations, and long term performance and O&M considerations. Recommendations will be made for proposed material(s) to be considered by the Design Engineer preparing the final design documents.

4.2 Pipeline and Appurtenance Design Criteria and Standards

RMC will develop recommendations for pipeline material standards; pressure rating requirements; isolation valve type, spacing and standards; air valve locating requirements, type and standards; blowoff location requirements, type and standards; trench requirements including bedding and backfill; joint restraint requirements; corrosion protection considerations for the acceptable pipeline materials (see assumptions, corrosion evaluation is not included in the scope); and vertical and horizontal alignment criteria and separation from existing utilities. These recommendations will be prepared so that they can be considered by the Design Engineer while preparing the final design documents.

4.3 Permitting, Traffic Control and Right of Way Requirements

RMC will identify agencies having jurisdiction over the installation of the project and will contact those agencies to identify contact information, currently applicable permitting requirements including application requirements, fees, review/approval process, and schedule.

RMC will develop preliminary recommendations for lane or road closures and identify general traffic control requirements for the agency having jurisdiction over the roadway.

RMC will identify right of way or easement acquisition requirements for the project for areas outside of the public right of way. It is assumed the City will provide an estimate of land acquisition costs for the identified easements if these costs are included in the project cost estimates.

4.4 Preliminary Drawings

RMC will prepare preliminary drawings for the proposed project. Pipeline alignment will be based on the alternative evaluation in Tasks 3.1 to 3.3. Preliminary drawings for both the potential northern extension on Buena Vista Drive will also be prepared. The preliminary drawings will include general sheets and plan and profile drawings at 1"=100' horizontal scale and 1"=10' vertical scale when printed on 11x17 paper. Plan view will include an aerial photograph background and the following:

- Proposed pipeline alignment and diameter
- Preliminary isolation valve locations
- Approximate RW customer turnout locations
- Preliminary air valve and blowoff locations
- Approximate right of way and property lines from City GIS
- Right of way width
- Property owner name and/or parcel id for private property crossings
- Proposed easement width
- City owned water, sewer, and storm drain pipelines
- City owned wells and sewage pump stations
- Nacimiento Project Pipeline
- Large natural gas and petroleum pipeline crossings (6-inch diameter and larger)
- Large telephone and fiber optic crossings (16 conduit bundle and larger)
- High voltage power underground conduits and overhead power lines (12kV and higher)

RMC will develop cross sections at key locations along the alignment to identify a position/location within the alignment corridor for the proposed pipeline.

Preliminary profiles will show approximate ground elevation based on City GIS contour data and the proposed pipeline at a minimum depth of cover. The pipeline alignment will cross many utilities but very few of them will have a large impact the profile of the proposed recycled water pipeline and therefore the presentation of the crossing utilities will vary as described below:

1. Utilities shown in the profile at appropriate elevations with ellipses (circular) or rectangle (rectangular) and a leader line:
    a. Major water pipelines (24-inch diameter and larger pipe)
    b. Major sewer pipelines (24-inch diameter and larger pipes)
    c. Major storm drains (24-inch and larger pipes or culverts)
    d. Major natural gas and petroleum pipelines (24-inch and larger pipes)
    e. Major fiber conduits (two foot tall duct bank or larger)
    f. Creek crossings
    g. The elevation for the water, sewer, and storm drain crossing pipelines will be from City GIS or record drawings. The elevation for natural gas pipelines, petroleum pipelines, and fiber optic duct banks will be from record drawings if available or with an assumed cover of four feet (assumed elevations will be noted).
2. Utilities shown in the profile window with just a leader line:
    a. Non-major water pipelines
    b. Non-major sewer pipelines
    c. Non-major storm drains
    d. Non-major fiber optic ductbanks

3. Utilities not listed above will not be shown in the profile window during the preliminary design stage.

The intent of the preliminary plan and profile drawings is to identify a potential position within the roadway cross section for the construction of the pipeline, identify major utility crossings, provide a basis for CEQA evaluation and traffic impacts, assist in preliminary permitting discussions, and provide a basis for preliminary construction cost estimating. The drawings are not intended for and are not to be used for competitive bidding, construction, or any other purpose. Other information not described above but typically shown on final design drawings will not be shown.

A list of preliminary drawings is provided in the table below.

Sheet #	DWG	Title
1	G-1	Title Sheet
2	G-2	Abbreviations and Legend
3	G-3	Location Map and Sheet Index
4	G-4	Hydraulic Grade Line
5 to 24	PP-1 to PP-20	Pipeline Plan and Profiles

4.5 List of Specifications, Project Schedule and Cost Estimate

RMC will develop a preliminary list of technical specifications that are anticipated to be required for the final design, for consideration by the Design Engineer. RMC will develop a proposed project schedule in Microsoft Project Gantt Chart format that will include the remaining project implementation tasks following preliminary design, including permitting, final design and construction. RMC will prepare a preliminary cost estimate for the project. The estimate will be a Class 3 (10-40% project definition) as defined by the AACE International Recommended Practice 56R-08. p

4.6 Preliminary Design Report

RMC will prepare a preliminary design report summarizing the work performed in Task 4. Preliminary Drawings in 11x17 format will be provided as an appendix to the report. The Preliminary Design Report will also include the TMs prepared under Task 3 as an appendix. The report will be submitted in draft form, RMC will attend a workshop with the City (see task 6), receive comments, and finalize the report.

Task 4 Deliverables:

- *Draft and Final Preliminary Design Report (pdf format)*

Task 5 - Exhibitions

To support the City's internal and external communication needs, RMC will prepare:

- Poster that illustrates the recycled water distribution system for the general public and grant funding agencies
- Brief PowerPoint presentation that highlights the features and benefits of the recycled water distribution system, which may be used by the RMC team and/or City staff to present the project to City Council and potential recycled water customers

Task 5 Deliverables:

- *Project Poster (pdf format)*
- *PowerPoint Presentation (PowerPoint)*

Task 6 - Project Management

6.1 Project Meetings/Workshops

RMC will prepare for and conduct up to five project meetings with the City at key points throughout the project. The meetings are anticipated to include the following:

- Kickoff Meeting
- Alignment Evaluation Workshop
- Hydraulic Evaluation Workshop
- Draft Preliminary Design Report Workshop
- Final Preliminary Design Report / Public Presentation

RMC will prepare an agenda and meeting notes for each meeting and distribute to the City project manager. At a minimum, RMC's project manager will attend each meeting. It is assumed that other project coordination and meetings can occur through conference calls or web-based presentations without additional cost to the City.

6.2 Project Tracking and Communication

RMC will prepare and submit progress reports and an updated the project schedule with the monthly project invoice. RMC will provide regular project coordination, communication and updates to the City and track the project scope, budget and schedule. The assumed project duration is six months.

6.3 Quality Assurance and Quality Control

RMC will implement its Quality Assurance Program requirements for the project, which will include a senior level technical review of project deliverables.

Task 6 Deliverables:

- *Monthly Project Schedule (pdf format)*
- *Monthly Progress Report (pdf format)*

Assumptions and Limitations

RMC's scope of work is based on the following assumptions and limitations as well as the assumptions and limitations included in the tasks above. In the event any facts or events differ from such assumptions; RMC's scope of work, schedule, and compensation will be adjusted accordingly.

- This preliminary design scope of work assumes subsurface conditions are generally consistent throughout the project area and will not significantly impact alignment selection nor construction cost. A preliminary geotechnical feasibility evaluation is not included in the scope of work. RMC will make recommendations in the PDR for geotechnical investigation to be conducted during the final design stage. RMC will review available subsurface data provided by the City and use this information in preliminary construction cost estimates for the PDR.

- This preliminary design scope of work assumes the proposed pipeline will be classified as a "sub-transmission pipeline" (typically 16- 30 inches diameter), Pipeline Function Class I (none to very low seismic importance) and will fall into design Category A or B in accordance with the American Lifelines Alliance (ALA) Seismic Guidelines for Water Pipelines. Pipeline Function Class I indicates the pipeline does not represent a hazard to human life nor is needed for post-earthquake response or recovery. Design Category A denotes standard (non-seismic) design and Category B includes the use of restrained pipe joints and extra valves, where applicable. Neither of these design categories would have an impact on pipe material selection or special seismic design; therefore a seismic hazard evaluation will not be included in the preliminary design phase but instead will be included as part of the Geotechnical Investigation that will be recommended for the final design.
- The City has a high quality GIS system which includes City owned water, sewer, and storm drain pipelines. It is assumed that the level of quality of the data (linework) is appropriate to be shown on the preliminary drawings. Before the GIS linework is used, an accuracy check will be performed by the City to determine if the linework aligns with surface features visible on the aerial photo imagery (manholes on manholes, valves on valves, etc.). The linework must be within one foot of the visible features to be appropriate for the plan view of the preliminary drawings. If the linework is below this level of accuracy, then either (1) the City will modify its GIS linework, or (2) the water, sewer, and storm drains will only be shown in the cross-sections on the preliminary drawings.
- Corrosivity evaluation is not included in the scope of work. RMC will make recommendations in the PDR for corrosivity evaluation and corrosion protection design to be conducted during the final design stage. RMC will review available corrosion protection standards or design on similar pipelines in the project area provided by the City and use this information in construction cost estimates for the PDR.
- Property line locations and property ownership information will come from the City GIS system. RMC will not check the accuracy of the property lines and property ownership information. Right-of-way information is approximate and not suitable for design or property acquisition purposes.
- Other than the key points surveyed as part of Task 1, ground elevation information will come from the City GIS system. RMC will not check the accuracy of the ground elevation information in the City GIS system. Ground elevation information is approximate and not suitable for design purposes.

Fee Estimate

City of Paso Robles

Preliminary Design of Paso Robles Recycled Water Distribution System

Tasks	RMC Labor											
	Dave Richardson	Rob Morrow	Rich Bichette	Glenn Hermanson	Romy Sharafi	EPS-1	CAD Tech	Leslie Dumas	Graphics	Admin	Total Hours	Total Labor Costs (1)
	PIC	PM	Pipeline Lead	Crossings QA/QC	PE	PE	CAD	GWR QA/QC	Graphics and Support Team			
	$299	$249	$249	$282	$166	$148	$165	$266	$120	$96		
Task 1: Data Collection and Review												
1.1 Data Collection and Review			4	4	8	8					24	$4,636
1.2 Utility Research			2		4	20				4	30	$4,506
1.3 Phase 1 Customer Profiles		52	4			78				1	135	$25,584
1.4 Agricultural Customer Outreach		48				72			8		128	$23,568
1.5 Ground Survey			4								4	$996
Subtotal Task 1:	0	100	14	4	12	178	0	0	8	5	321	$59,290
Task 2: Groundwater Recharge Evaluation												
2.1 Groundwater Recharge Regulatory Assessment		24			24						48	$9,960
2.2 Review Existing Data / Construct Cross Sections											0	$0
2.3 Develop GIS Database / Screen for Potential Recharge Sites											0	$0
2.4 Conduct Field Investigation											0	$0
2.5 Prepare Draft and Final TMs		8								2	10	$2,184
Subtotal Task 2:	0	32	0	0	24	0	0	0	0	2	58	$12,144
Task 3: Facilities Evaluation												
3.1 Alignment Evaluation		4	24		60		24			4	116	$21,276
3.2 Trenchless Crossings Evaluation		2		60	12		30			2	106	$24,552
3.3 Nacimiento Project Connection Evaluation		4	8		18						30	$5,976
3.4 Hydraulic Evaluation and Modeling		16	52		124					2	194	$37,708
Subtotal Task 3:	0	26	84	60	214	0	54	0	0	8	446	$89,512
Task 4: Preliminary Design Report												
4.1 Pipeline Material Evaluation and Recommendations			4	4	8	8					24	$4,636
4.2 Pipeline and Appurtenance Design Criteria and Standards			4	4	12	12					32	$5,892
4.3 Permitting, Traffic Control and Right of Way Requirements			8		12	12					32	$5,760
4.4 Preliminary Drawings			24	16	16	34	128				218	$39,296
4.5 List of Specifications, Project Schedule and Cost Estimate			8	4	20	20					52	$9,400
4.6 Preliminary Design Report		8	24	16		84	8			8	148	$27,000
Subtotal Task 4:	0	8	72	44	68	170	136	0	0	8	506	$91,984
Task 5: Exhibitions												
Exhibitions	1	20				16			16		53	$9,567
Subtotal Task 5:	1	20	0	0	0	16	0	0	16	0	53	$9,567
Task 6: Project Management												
6.1 Project Meetings/Workshops		20	20	8	20						68	$15,536
6.2 Project Tracking and Communication		18	6		12					9	45	$8,832
6.3 Quality Assurance and Quality Control	4			30				8			42	$11,784
Subtotal Task 6:	4	38	26	38	32	0	0	8	0	9	155	$36,152
TOTAL	**5**	**224**	**196**	**146**	**350**	**364**	**190**	**8**	**24**	**32**	**1,539**	**$298,649**

Notes:

1. The individual hourly rates include salary, overhead and profit.
2. Subconsultants will be billed at actual cost plus 10%.
3. Other direct costs (ODCs) such as reproduction, delivery, mileage (rates will be those allowed by current IRS guidelines), and travel expenses, will be billed at actual cost plus 10%.
4. RMC reserves the right to adjust its hourly rate structure and ODC markup at the beginning of the calendar year for all ongoing contracts.
5. Marc Battany's services will be conducted as part of his existing position with U.C. Agricultural Extension. As a result, he will not bill the project for his time.

Fee Estimate

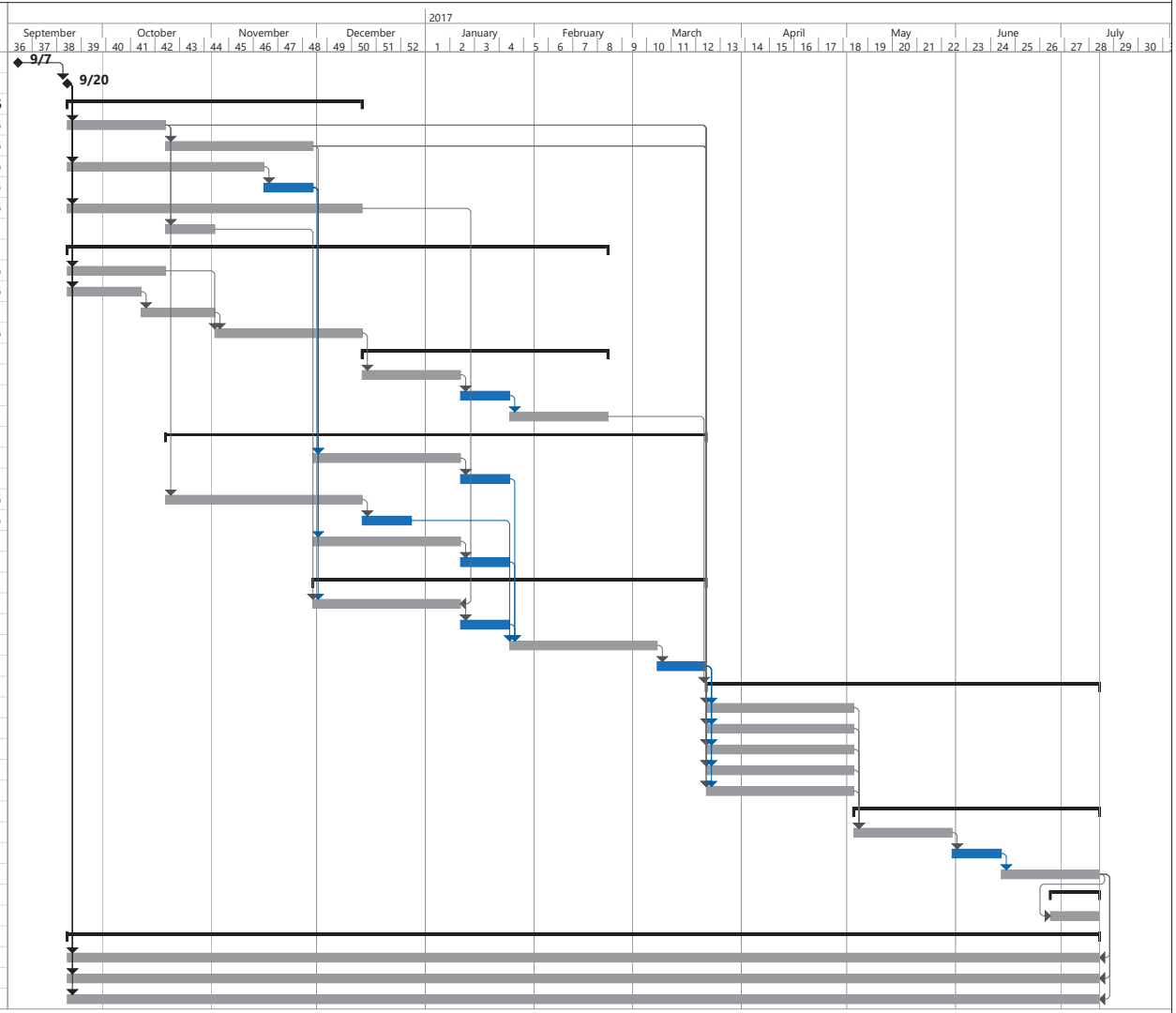
City of Paso Robles

Preliminary Design of Paso Robles Recycled Water Distribution System

Tasks	Todd Groundwater								Other Sub Consultants				Subconsultant		ODCs	Total
	Principal-in-Charge	PM-Senior Hydrogeo.	Staff Hydrogeo.	Drafting / Graphics	Subtotal Hours	ODCs	Subtotal Cost	Todd Total Cost (2)	North Coast Engineering	Drilling Contractor	Staheli Trenchless	Mark Battany (UC Extsn)	Subtotal	Sub Consultant Total Cost (2)	RMC ODCs (3)	Total Fee
	$220	$200	$150	$110					Survey	Field Investigation	Trenchless Crossings	Agronomist				
												See Note 5				
Task 1: Data Collection and Review																
1.1 Data Collection and Review													$0	$0	$0	$4,636
1.2 Utility Research													$0	$0	$0	$4,506
1.3 Phase 1 Customer Profiles													$0	$0	$350	$25,934
1.4 Agricultural Customer Outreach												See Note 5	$0	$0	$200	$23,768
1.5 Ground Survey									$3,245				$3,245	$3,570	$0	$4,566
Subtotal Task 1:									$3,245	$0	$0	$0	$3,245	$3,570	$550	$63,410
Task 2: Groundwater Recharge Evaluation																
2.1 Groundwater Recharge Regulatory Assessment	2				2		$440	$484					$0	$0	$100	$10,544
2.2 Review Existing Data / Construct Cross Sections	2	54	46	16	118		$19,900	$21,890					$0	$0	$0	$21,890
2.3 Develop GIS Database / Screen for Potential Recharge Sites	6	62	26	6	100		$18,280	$20,108					$0	$0	$0	$20,108
2.4 Conduct Field Investigation	2	52	72	8	134	$1,748	$24,268	$26,695		$21,275			$21,275	$23,403	$0	$50,098
2.5 Prepare Draft and Final TMs	6	38	8	16	68		$11,880	$13,068					$0	$0	$0	$15,252
Subtotal Task 2:	18	206	152	46	422	$1,748	$74,768	$82,245	$0	$21,275	$0	$0	$21,275	$23,403	$100	$117,892
Task 3: Facilities Evaluation																
3.1 Alignment Evaluation													$0	$0	$300	$21,576
3.2 Trenchless Crossings Evaluation											$25,383		$25,383	$27,921	$0	$52,473
3.3 Nacimiento Project Connection Evaluation													$0	$0	$0	$5,976
3.4 Hydraulic Evaluation and Modeling													$0	$0	$0	$37,708
Subtotal Task 3:									$0	$0	$25,383	$0	$25,383	$27,921	$300	$117,733
Task 4: Preliminary Design Report																
4.1 Pipeline Material Evaluation and Recommendations													$0	$0	$0	$4,636
4.2 Pipeline and Appurtenance Design Criteria and Standards													$0	$0	$0	$5,892
4.3 Permitting, Traffic Control and Right of Way Requirements													$0	$0	$0	$5,760
4.4 Preliminary Drawings													$0	$0	$0	$39,296
4.5 List of Specifications, Project Schedule and Cost Estimate													$0	$0	$0	$9,400
4.6 Preliminary Design Report													$0	$0	$0	$27,000
Subtotal Task 4:									$0	$0	$0	$0	$0	$0	$0	$91,984
Task 5: Exhibitions																
Exhibitions		2			2		$400	$440					$0	$0	$0	$10,007
Subtotal Task 5:	0	2	0	0	2		$400	$440	$0	$0	$0	$0	$0	$0	$0	$10,007
Task 6: Project Management																
6.1 Project Meetings/Workshops													$0	$0	$1,000	$16,536
6.2 Project Tracking and Communication													$0	$0	$0	$8,832
6.3 Quality Assurance and Quality Control													$0	$0	$0	$11,784
Subtotal Task 6:									$0	$0	$0	$0	$0	$0	$1,000	$37,152
TOTAL	**18**	**208**	**152**	**46**	**424**	**$1,748**	**$75,168**	**$82,685**	**$3,245**	**$21,275**	**$25,383**	**$0**	**$49,903**	**$54,894**	**$1,950**	**$438,178**

Preliminary Design of the Paso Robles Recycled Water Distribution System

ID	Task Name	Duration	Start	Finish
1	**Notice to Proceed**	0 days	Wed 9/7/16	Wed 9/7/16
2	Kickoff Meeting (under Task 6)	0 wks	Tue 9/20/16	Tue 9/20/16
3	**Task 1: Data Collection and Review**	**60 days**	**Wed 9/21/16**	**Tue 12/13/16**
4	1.1: Data Collection and Review	4 wks	Wed 9/21/16	Tue 10/18/16
5	1.2: Utility Research	6 wks	Wed 10/19/16	Tue 11/29/16
6	1.3: Customer Demand Profiles	8 wks	Wed 9/21/16	Tue 11/15/16
7	City Review of TM	2 wks	Wed 11/16/16	Tue 11/29/16
8	1.4: Agricultural Customer Outreach	12 wks	Wed 9/21/16	Tue 12/13/16
9	1.4: Ground Survey	2 wks	Wed 10/19/16	Tue 11/1/16
10	**Task 2: Groundwater Recharge Evaluation**	**110 days**	**Wed 9/21/16**	**Tue 2/21/17**
11	2.1: Groundwater Recharge Regulatory Assessment	4 wks	Wed 9/21/16	Tue 10/18/16
12	2.2: Review Data / Construct Cross Sections	3 wks	Wed 9/21/16	Tue 10/11/16
13	2.3: Develop GIS / Screen Recharge Sites	3 wks	Wed 10/12/16	Tue 11/1/16
14	2.4: Conduct Field Investigation	6 wks	Wed 11/2/16	Tue 12/13/16
15	2.5: Prepare Draft and Final TMs	50 days	Wed 12/14/16	Tue 2/21/17
16	Prepare/Submit Draft TM	4 wks	Wed 12/14/16	Tue 1/10/17
17	City Review of TM	2 wks	Wed 1/11/17	Tue 1/24/17
18	Prepare/Submit Final TM	4 wks	Wed 1/25/17	Tue 2/21/17
19	**Task 3: Alignment Evaluation and Sizing**	**110 days**	**Wed 10/19/16**	**Tue 3/21/17**
20	3.1: Alignment Evaluation	6 wks	Wed 11/30/16	Tue 1/10/17
21	City Review of TM	2 wks	Wed 1/11/17	Tue 1/24/17
22	3.2: Trenchless Crossing Evaluation	8 wks	Wed 10/19/16	Tue 12/13/16
23	City Review of TM	2 wks	Wed 12/14/16	Tue 12/27/16
24	3.3: Nacimiento Project Connection Evaluation	6 wks	Wed 11/30/16	Tue 1/10/17
25	City Review of TM	2 wks	Wed 1/11/17	Tue 1/24/17
26	3.4: Hydraulic Evaluation and Modeling	80 days	Wed 11/30/16	Tue 3/21/17
27	Phase 1 Storage Evaluation	6 wks	Wed 11/30/16	Tue 1/10/17
28	City Review of TM	2 wks	Wed 1/11/17	Tue 1/24/17
29	Hydraulic Modeling	6 wks	Wed 1/25/17	Tue 3/7/17
30	City Review of TM	2 wks	Wed 3/8/17	Tue 3/21/17
31	**Task 4: Preliminary Design Report**	**80 days**	**Wed 3/22/17**	**Tue 7/11/17**
32	4.1: Pipeline Material Evaluation and Recommendations	6 wks	Wed 3/22/17	Tue 5/2/17
33	4.2: Pipeline and Appur. Design Criteria and Standards	6 wks	Wed 3/22/17	Tue 5/2/17
34	4.3: Permitting, Traffic Control and ROW Requirements	6 wks	Wed 3/22/17	Tue 5/2/17
35	4.4: Preliminary Drawings	6 wks	Wed 3/22/17	Tue 5/2/17
36	4.5: List of Spec., Project Schedule and Cost Estimate	6 wks	Wed 3/22/17	Tue 5/2/17
37	**4.6: Preliminary Design Report (Draft and Final)**	**50 days**	**Wed 5/3/17**	**Tue 7/11/17**
38	Prepare/Submit Draft PDR	4 wks	Wed 5/3/17	Tue 5/30/17
39	City Review of PDR	2 wks	Wed 5/31/17	Tue 6/13/17
40	Prepare/Submit Final PDR	4 wks	Wed 6/14/17	Tue 7/11/17
41	**Task 5: Exhibition**	**10 days**	**Wed 6/28/17**	**Tue 7/11/17**
42	5.1: Exhibition	2 wks	Wed 6/28/17	Tue 7/11/17
43	**Task 6: Project Management**	**210 days**	**Wed 9/21/16**	**Tue 7/11/17**
44	6.1: Project Meetings/Workshops	42 wks	Wed 9/21/16	Tue 7/11/17
45	6.2: Project Tracking and Communication	42 wks	Wed 9/21/16	Tue 7/11/17
46	6.3: Quality Assurance and Quality Control	42 wks	Wed 9/21/16	Tue 7/11/17



SWCA
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August 16, 2016

Matt Thompson, P.E.
Wastewater Resource Manager
City of Paso Robles
1000 Spring Street
Paso Robles, California, 93446

Submitted via email: mthompson@prcity.com

Re: Proposal to Provide Environmental Services for the Recycled Water Production Facilities Project / SWCA No. 30462

Dear Mr. Thompson:

SWCA Environmental Consultants (SWCA) appreciates the opportunity to provide the City of Paso Robles (City) with our scope of work and cost estimate to provide environmental services for the proposed Recycled Water Distribution System Project (project) associated with the Paso Robles Wastewater Tertiary Water Treatment Facility. It is our understanding that the City anticipates that a California Environmental Quality Act (CEQA)-Plus document would be required to comply with CEQA and the National Environmental Policy Act. In addition, the City would be required to provide documentation of compliance with Section 7 Endangered Species Act and Section 106 of the National Historic Preservation Act.

The cost to complete the proposed tasks, as described in the attached scope of work, is a **time and materials, not-to-exceed** amount of **$85,819** (including documents, meetings and hearing, and agency consultation). Thank you for providing us with the opportunity to continue our work with you on this project. Should you have any questions regarding our scope of work or cost estimate, please contact Jon Claxton at (805) 543-7095, extension 6813, or via email at jclaxton@swca.com.

Sincerely,

Jon Claxton
Natural Resources Team Leader/Project Manager

SCOPE OF WORK

In 2015, SWCA Environmental Consultants (SWCA) prepared the Initial Study/Mitigated Negative Declaration (IS/MND) for the Paso Robles Tertiary Treatment Facility located at 3200 Sulphur Springs Road, in Paso Robles. The IS/MND evaluated impacts for the construction and operation of the Tertiary Treatment Facility.

Currently, the City of Paso Robles (City) is proposing to install the distribution lines that are associated with the Tertiary Treatment Facility in order to convey recycled water to customers and City properties located east of the Salinas River. To accomplish this, the City is applying for Clean Water State Revolving Funds (CWSRF) through the State Water Resources Control Board (SWRCB) to fund this project. The CWSRF Program is partially funded by a capitalization grant from the U.S. Environmental Protection Agency (USEPA) and issuance of the funds is considered equivalent to a federal action. Therefore, the proposed project would require state and federal clearances, at a minimum including "California Environmental Quality Act (CEQA)-Plus" review, along with Section 7 Endangered Species Act consultation and Section 106 Consultation with the State Historic Preservation Office. These clearances are required as part of the application process for funding.

Our proposed scope of work includes the following tasks, which are described in additional detail below:

- Preparation of a project description, with input from the City and the City's consultant engineer (including a preliminary site plan and grading plan), within 4 to 5 months from notice to proceed.
- Preparation of an IS/MND, building upon the IS/MND that was prepared and filed for the Tertiary Treatment Project.
- Coordination with Susan DeCarli of the City's Planning Department and Matt Thompson of Public Works, as needed.
- Preparation of Endangered Species Act Section 7 Biological Assessment
- Section 7 consultation support with the U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries) (as needed for river crossing).
- Early coordination with SWRCB environmental compliance staff to ensure our documentation meets their requirements.
- Preparation of Phase I Cultural Resources Survey Report for Section 106 Consultation with the State Historic Preservation Officer.

TASK 1: INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

TASK 1.1: PROJECT DESCRIPTION

SWCA will prepare a written project description based on plans received from the City. The administrative draft project description will be provided in electronic form. Upon receipt of comments and clarifications from the City, SWCA will prepare a final project description. This task will be completed within 4 to 5 months from the notice to proceed, and within 2 weeks upon receipt of preliminary site and grading plans from the City.

TASK 1.2: EARLY COORDINATION

Upon completion of the project description, SWCA will coordinate directly with Ms. DeCarli, City Planning Department, to ensure the IS/MND format, scope, and content is consistent with the City's requirements. SWCA will also

coordinate directly with City (Mr. Thompson) and SWRCB staff to ensure the analysis and information presented in the IS/MND will meet SWRCB's requirements for consideration of the CWSRF application, and to ensure all forms and documentation are complete. This will include early review of the Initial Study by the SWRCB.

TASK 1.3: INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

Preparation of the IS/MND will include an assessment of all resources as required by CEQA Guidelines Appendix G. The environmental analysis will incorporate all approved technical studies (i.e., Biological Assessment, Cultural Resources Report) and any information provided by the City and other agencies. Air emissions will be quantified using the California Emission Estimator Model (CalEEMod), and output spreadsheets will be attached to the IS/MND. Additional background information will be obtained from the City General Plan and project documents, the Recycled Water Master Plan, resource agency online documents, and our in-house library. The Draft Notice of Determination (NOD) form will accompany the IS Checklist. Our submittal will include a Mitigation Monitoring and Reporting Program (MMRP), which will identify each mitigation measure, the appropriate milestone or timing to implement the measure, the responsible party, and any reporting requirements.

SWCA will submit an Administrative Draft IS/MND for the City's review and approval. Upon receipt of City comments on the Administrative Draft, SWCA will revise the NOD, IS Checklist, and MMRP for review by the SWRCB. Upon receipt of comments from the SWRCB, and as approved by the City, SWCA will finalize the NOD, IS Checklist, and MMRP for public review and circulation. This task includes preparation of the Notice of Completion (NOC) form and Notice of Intent to Adopt an MND (NOI). Our scope of work assumes that SWCA will provide complete electronic versions of all documents to the City, including Word (.doc) and Adobe (.pdf) versions. We assume that City administrative staff will submit the NOC and 15 copies of the IS/MND to the State Clearinghouse, file the NOI with the County Clerk, and post the notice in the newspaper and City website. We will provide written responses to comments received during circulation of the IS/MND.

TASK 1.4: MEETINGS AND HEARINGS

The scope of work includes one site visit and up to three in-person meetings with City staff, agencies, and interested parties (if necessary). Preparation for and attendance at one anticipated project hearing is also included in our scope. We are prepared to present information and respond to questions.

TASK 1 COST ESTIMATE

The cost for this task would be **$18,447.**

TASK 2: STATE REVOLVING FUND ENVIRONMENTAL PACKAGE FORMS

TASK 2.1: ALTERNATIVES ANALYSIS TECHNICAL MEMORANDUM

SWCA will prepare an Alternatives Analysis Technical Memorandum to support the City and Design Team's consideration of potential design alternatives. The memorandum will be prepared based information received from the City and design team and desktop review only, and will not include additional resource surveys. The analysis will consider eight alternative alignment alternatives; three Salinas River trenchless crossing alternatives; two Huer Huero Creek crossing alternatives; three Highway 46 crossing alternatives; and four storage/tank site alternatives. SWCA will prepare a stand-alone Technical Memorandum for this task.

TASK 2.2: STATE REVOLVING FUND ENVIRONMENTAL PACKAGE FORMS

SWCA will prepare the Environmental Package (federal cross-cutting forms) for the City's review and use in the Financial Assistance Application for State Revolving Funds. All required information, including Clean Air Act Conformity and emissions modeling outputs, special-status species lists, and floodplain mapping will be attached. As noted above, SWCA will assist the City as requested during coordination efforts with SWRCB.

TASK 2 COST ESTIMATE

The cost for this task would be **$12,680**.

TASK 3: ENDANGERED SPECIES ACT CONSULTATION SUPPORT

According to California Water Code 1701.3(b)(2), the State may request additional information to demonstrate compliance with the California Fish and Game Code or the federal Endangered Species Act (United States Code Title 16, Section 1531 et seq.). The following describes the scope of services anticipated during the Section 7 consultation process, which will be necessary with USFWS and NOAA Fisheries. The scope of services for coordinating with the California Department of Fish and Wildlife (CDFW) would be completed through coordination with CDFW during the CEQA process (Task 1).

TASK 3.1: U.S. FISH AND WILDLIFE SERVICE CONSULTATION

As part of this scope of work, SWCA proposes to provide support to the City, State, and USEPA during early coordination with USFWS. SWCA is not allowed to directly coordinate with USFWS since SWCA is not a federal agency. However, as an initial step, SWCA would request that USEPA take the lead in early coordination with USFWS to determine in writing what technical studies or documentation will be required by USFWS for Section 7 consultation purposes.

It is anticipated that USFWS would require that a formal Biological Assessment be prepared and submitted to their agency for review. SWCA does not anticipate at this time that any protocol-level field surveys would be required as part of this effort. Therefore, this scope of work is limited to the preparation of a formal Biological Assessment, which will only address federal terrestrial species. SWCA has anticipated that three botanical surveys would need to be conducted for those areas that are not urbanized.

Given past experience in working with USFWS on the Section 7 consultation effort for the Water Treatment Plant Upgrade Project, SWCA anticipates that there will be a moderate amount of internal coordination and no more than two meetings (teleconference) required as part of this process.

TASK 3.2: NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL MARINE FISHERIES SERVICE

To ensure compliance with the federal Endangered Species Act and in order to adhere to the California Water Code, SWCA recommends early coordination with NOAA Fisheries to solicit input regarding the level of documentation required to satisfy the Section 7 consultation. As with USFWS, SWCA is not allowed to directly coordinate with NOAA Fisheries. However, SWCA would support the initial coordination effort which would be led by USEPA.

At this time, SWCA anticipates that a separate Biological Assessment may be required for any potential impacts that may occur to Huer Huero Creek or the Salinas River. The Biological Assessment would need to be prepared in order to address potential impacts to South-Central California Coast steelhead (*Oncorhynchus mykiss*), a federally

threatened species. SWCA does not anticipate that any focused surveys would need to be conducted to complete this analysis.

Overall, it has been SWCA's experience that coordinating with NOAA Fisheries staff is straight forward in comparison to coordination with USFWS. SWCA anticipates that there will be a minimal amount of internal coordination and no more than one meeting (teleconference) with NOAA Fisheries would be required.

TASK 3 COST ESTIMATE

The cost for this task would be **$26,296**.

TASK 4: CULTURAL RESOURCES STUDY

In compliance with CEQA, Section 106 of the National Historic Preservation Act, and the County of San Luis Obispo and City guidelines for protecting cultural resources, SWCA has identified the following specific tasks to be completed.

TASK 4.1: AREA OF POTENTIAL EFFECTS MAP

SWCA will assist in the preparation of a project Area of Potential Effects (APE) map, which will delineate the project study area. This figure will depict all areas that are expected to be affected by the proposed project, including staging and construction access areas. It will be plotted on an aerial photograph at a scale of approximately 1" = 200'. The purpose of the project APE is to ensure identification of significant cultural resources that may be listed in, determined eligible for, or appear to be eligible for listing in the National Register of Historic Places (NRHP) that may be affected, either directly or indirectly, by the proposed project.

TASK 4.2: RECORDS SEARCH AND LITERATURE REVIEW

Compliance with CEQA and Section 106 requires that an affirmative search be undertaken to identify properties listed in, determined eligible, or eligible for listing in the NRHP and California Register of Historical Resources (CRHR) that may be affected by the proposed project. SWCA will conduct background research, in part, by performing a records search for the property at the Central Coast Information Center (CCIC) located at the University of California, Santa Barbara. The CCIC is the regional office of the California Historical Resources Information System (CHRIS) and the primary purpose of the records search is to acquire site records for all relevant previously recorded cultural resources within, or within 0.5 mile of, the project area, as well as pertinent copies of previous studies.

TASK 4.3: NATIVE AMERICAN COORDINATION

SWCA will contact the California Native American Heritage Commission (NAHC) for a review of their Sacred Lands File. The NAHC will determine if any NAHC-listed Native American sacred lands are located within or adjacent to the project area. In addition, the NAHC will provide a list of Native American contacts for the project that they believe should be contacted for additional information. SWCA will prepare and mail a letter to each of the NAHC-listed contacts, requesting that they contact SWCA if they know of any Native American cultural resources within or immediately adjacent to the project area. Should additional Native American consultation be required, SWCA would request a change order to complete this additional work. This effort will be conducted in coordination with the City's obligation under AB 52, which requires lead agencies to take into consideration Native American concerns regarding development projects.

TASK 4.4: FIELD SURVEY

Upon completion of the CHRIS records search, SWCA will conduct an intensive pedestrian survey of the entire APE. SWCA cultural resources specialists will conduct the survey utilizing pedestrian transects spaced at intervals of approximately 15 meters, covering all portions of the project area. For the purposes of this proposal and cost estimate, SWCA assumes that the survey will be negative and is not including the recordation of any resources. If any resources (e.g., prehistoric or historic archaeological sites or built environment resources) are identified during the pedestrian survey, a change order will be requested in order to officially document the resource(s). No testing or evaluation will be conducted, nor will any artifacts, samples, or specimens be collected during the survey.

TASK 4.5. TECHNICAL REPORT

Upon completion of the literature review, Native American consultation, and field survey, SWCA will prepare a technical report that will summarize the results of the study, as well as provide management recommendations for resources within or near the project area. The report will include maps depicting the area surveyed for cultural resources. SWCA assumes that an electronic draft of this report and figures will be submitted to you for review. Upon receipt of your comments on the draft document, SWCA will incorporate the input and produce the final report. SWCA assumes that only one round of review will be necessary. If the locations of sensitive archaeological sites or Native American cultural resources are shown or described in the report, the report will be considered confidential. The report may not be distributed to the public. In order to protect these sensitive resources, the confidential technical report shall be made available only to qualified cultural resources personnel, the landowner, and project management personnel on a “need-to-know” basis.

TASK 4 COST ESTIMATE

The cost for this task would be **$17,579**.

TASK 5. ADDITIONAL SUPPORT – CDFW WASTEWATER CHANGE PETITION

In May 2016, SWCA provided additional support to the City of Paso Robles in reviewing the original wastewater change petition letter from the California Department of Fish and Wildlife received on May 16, 2016. SWCA also support the City with the preparation of a formal response. Task 5 is included within this scope of work, at the request of the City, should there be additional support needed with this effort. The exact scope of work is not known at this time. Budget for Task 5 would only be utilize for on-call services from the City, on an as-needed basis.

TASK 4 COST ESTIMATE

The cost for this task would be **$10,819**.

ASSUMPTIONS

For budgeting purposes, we are making the following assumptions because some of these items are beyond SWCA’s control and because these factors could significantly affect project schedule and cost:

1. Staff working on the project will be billed based on their current standard title and default rate at the time the work is completed.

2. Meeting attendance by SWCA staff will be on a time and material basis.

3. One round of comments will be addressed for the report. Should additional revisions be necessary following review, a change order will be necessary to perform the work.

4. A change order would be required to officially document any cultural resources (e.g., prehistoric or historic archaeological sites).

5. The survey crew will have unhindered access to the entire APE.

6. SWCA assumes that no historic-era structures or buildings are within the APE and that no potential direct or indirect effects will occur to built environment resources as a result of the proposed project, and no recordation of built environment resources will be required. Should a built environment survey or recordation of built environment resources be required, a change order would be necessary to complete the work.

7. SWCA assumes that there will be no impacts to the jurisdiction of the U.S. Army Corps of Engineers or CDFW as a result of the Recycled Water Production Facility. Any additional focused, or protocol-level, studies or requirements beyond the preparation of the Biological Assessment and coordination with USFWS/NOAA Fisheries would be conducted under a separate scope and budget.

8. SWCA assumes that the City and design team will provide graphical data (shape files and/or AutoCAD) for use during preparation of the technical reports, alternatives analysis, and CEQA analysis.

COST ESTIMATE

The budget for this project is a time and materials, not-to-exceed estimate of **$85,819**. We have attempted to be conservative in preparation of the budget with regard to the level of effort required so that the overall cost estimates are reasonable for your planning purposes. SWCA will not proceed with any work in excess of the time and materials, not-to-exceed budget without prior authorization to proceed from the City.

Table 1. Scope of Work Cost Estimate

TASK	HOURS	LABOR	EXPENSES	TOTAL
Task 1: Initial Study / Mitigated Negative Declaration	139	$ 18,332.00	$ 115.00	$ 18,447.00
Task 2: State Revolving Fund Environmental Package Forms	100	$ 12,680.00	-	$ 12,680.00
Task 3: Endangered Species Act Consultation Support	178	$ 26,172.00	$ 124.00	$ 26,296.00
Task 4. Cultural Resources Study	124	$ 16,420.00	$ 1,159.00	$ 17,579.00
Task 5: Additional Support – Wastewater Change Petition	73	$ 10,817.00	-	$ 10,817.00
PROJECT TOTAL	614	$ 84,421.00	$ 1,398.00	$ 85,819.00

RESOLUTION NO. 16-XXX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL PASO DE ROBLES TO AUTHORIZE AN AGREEMENT WITH RMC WATER AND ENVIRONMENT FOR PRELIMINARY DESIGN OF A RECYCLED WATER DISTRIBUTION SYSTEM

WHEREAS, the City has adopted a master plan to produce recycled water at its wastewater treatment plant with Tertiary Treatment Facilities and deliver the recycled water to east Paso Robles with a Recycled Water Distribution System: and

WHEREAS, in order to compete for potential low interest loans and grants through the State's Revolving Fund (SRF) loan program, the City must proceed with design of the Recycled Water Distribution System; and

WHEREAS, a committee of City staff completed a qualifications-based selection process for preliminary design of the Recycled Water Distribution System. The selection committee determined RMC Water and Environment is the most qualified and best fit for the design work. RMC Water and Environment is a professional engineering firm based in Walnut Creek that specializes in planning and design of recycled water projects; and

WHEREAS, City staff negotiated a scope of work, fee, and schedule with RMC Water and Environment. The fee for preliminary design of the Recycled Water Distribution System is $438,178; and

WHEREAS, the adopted budget for Fiscal Year includes $1,065,000 for the Recycled Water Distribution System (Budget No. 6019101-54520-C0078). The proposed expenditure is within this budget.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EL PASO DE ROBLES DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. The City Council hereby authorizes the City Manager to execute a professional services agreement with RMC Water and Environment for preliminary design of the Recycled Water Distribution System, for an amount not to exceed $438,178.

Section 2. The City Council authorizes the City Manager to make minor changes in the agreement, if necessary, to best meet City needs.

APPROVED by the City Council of the City of El Paso de Robles this 6TH day of September 2016, by the following votes:

AYES:
NOES:
ABSTAIN:
ABSENT:

Steven W. Martin, Mayor

ATTEST:

Kristen L. Buxkemper, Deputy City Clerk

RESOLUTION NO. 16-XXX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL PASO DE ROBLES TO AMEND A CONTRACT WITH SWCA ENVIRONMENTAL CONSULTANTS TO PROVIDE ENVIRONMENTAL CONSULTING SERVICES FOR THE RECYCLED WATER DISTRIBUTION SYSTEM

WHEREAS, the City has a master plan to produce recycled water at its wastewater treatment plant with Tertiary Treatment Facilities and deliver the recycled water to east Paso Robles with a Recycled Water Distribution System; and

WHEREAS, in order to compete for potential low interest loans and grants through the State's Revolving Fund (SRF) loan program, the City requires the services of a specialized environmental consultant; and

WHEREAS, the City presently has a contract with SWCA Environmental Consultants of San Luis Obispo, for environmental consulting services related to upgrade of the City's wastewater treatment plant and construction of Tertiary Treatment Facilities; and

WHEREAS, City staff has negotiated a scope of work and fee with SWCA Environmental Consultants for environmental consulting services for the Recycled Water Distribution System. Tasks include preparation of an initial study and mitigated negative declaration and consultation with permitting agencies. SWCA's fee for this scope of work is $85,819; and

WHEREAS, SWCA Environmental Consultants has demonstrated through its work on the wastewater treatment plant upgrade project and Tertiary Treatment Facilities that it is well qualified to prepare environmental documents that meet SRF requirements. Since SWCA Environmental Consultants has already completed studies of the wastewater treatment plant site that will be similar for the Recycled Water Distribution System, SWCA is in the best position to efficiently complete all necessary environmental documents for the Recycled Water Distribution System.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EL PASO DE ROBLES DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. The City Council hereby approves amendment of a contract with SWCA Environmental Consultants for environmental services for the Recycled Water Distribution System, for an amount not to exceed $85,819, and authorizes the City Manager to execute the contract amendment.

Section 2. The City Council authorizes the City Manager to make minor changes in the agreement, if necessary, to best meet City needs.

APPROVED by the City Council of the City of El Paso de Robles this 6TH day of September 2016, by the following votes:

AYES:
NOES:
ABSTAIN:
ABSENT:

Steven W. Martin, Mayor

ATTEST:

Kristen L. Buxkemper, Deputy City Clerk

RESOLUTION NO. 16-XXX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL PASO DE ROBLES FOR REIMBURSEMENT OF COSTS FOR THE PASO ROBLES RECYCLED WATER PROJECT BY STATE REVOLVING FUND LOAN PROGRAM

WHEREAS, the City of El Paso de Robles (the "Agency") desires to finance the costs of constructing and/or reconstructing certain public facilities and improvements relating to its water and wastewater system, including certain treatment facilities, pipelines and other infrastructure (the "Project"); and

WHEREAS, the Agency intends to finance the construction and/or reconstruction of the Project or portions of the Project with moneys ("Project Funds") provided by the State of California, acting by and through the State Water Resources Control Board (State Water Board); and

WHEREAS, the State Water Board may fund the Project Funds with proceeds from the sale of obligations the interest upon which is excluded from gross income for federal income tax purposes (the "Obligations"), and

WHEREAS, prior to either the issuance of the Obligations or the approval by the State Water Board of the Project Funds the Agency desires to incur certain capital expenditures (the "Expenditures") with respect to the Project from available moneys of the Agency; and

WHEREAS, the Agency has determined that those moneys to be advanced on and after the date hereof to pay the Expenditures are available only for a temporary period and it is necessary to reimburse the Agency for the Expenditures from the proceeds of the Obligations.

NOW, THEREFORE, THE AGENCY DOES HEREBY RESOLVE, ORDER AND DETERMINE AS FOLLOWS:

Section 1. The Agency hereby states its intention and reasonably expects to reimburse Expenditures paid prior to the issuance of the Obligations or the approval by the State Water Board of the Project Funds.

Section 2. The reasonably expected maximum principal amount of the Project Funds is $29,730,000.

Section 3. This resolution is being adopted no later than 60 days after the date on which the Agency will expend moneys for the construction portion of the Project costs to be reimbursed with Project Funds.

Section 4. Each Agency expenditure will be of a type properly chargeable to a capital account under general federal income tax principles.

Section 5. To the best of our knowledge, this Agency is not aware of the previous adoption of official intents by the Agency that have been made as a matter of course for the purpose of reimbursing expenditures and for which tax-exempt obligations have not been issued.

Section 6. This resolution is adopted as official intent of the Agency in order to comply with Treasury Regulation §1.150-2 and any other regulations of the Internal Revenue Service relating to the qualification for reimbursement of Project costs.

Section 7. All the recitals in this Resolution are true and correct and this Agency so finds, determines and represents.

PASSED AND ADOPTED by the City Council of the City of El Paso de Robles this 6th day of September 2016 by the following votes:

AYES:
NOES:
ABSTAIN:
ABSENT:

Steven W. Martin, Mayor

CERTIFICATION:

I do hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the City Council of the City of El Paso de Robles held on September 6, 2016:

Kristen L. Buxkemper, Deputy City Clerk